

What is claimed is:

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1. An immortalized human cardiomyocyte cell line.
2. An immortalized human vascular smooth muscle cell line.
3. The cell line of claim 1, wherein the cardiomyocyte cell line is designated AC16 (ATCC Designation No. PTA-1500).
4. The cell line of claim 1, wherein the cardiomyocyte cell line is designated AC10 (ATCC Designation No. PTA-1501).
5. The cell line of claim 1, wherein the cardiomyocyte cell line is designated RL14 (ATCC Designation No. PTA-1499).
6. The cell line of claim 1, wherein the cell line integrates functionally with normal or myopathic cardiac tissue as determined by measurement of syncytial beating of the tissue.
7. A method for treating damaged cardiac tissue in a subject which comprises transplanting the cell line of claim 1 into a subject's heart containing damaged cardiac tissue.
8. A method for preparing a human immortalized cell line derived from a post-mitotic primary cell culture which comprises:
 - (a) providing a cell culture of human primary post-mitotic cells,
 - (b) providing a human fibroblast cell line which:
 - (i) has been transfected with a replicable nucleic acid vector which immortalizes

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Sub B3

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17. The method of claim 13 or 14, wherein the composition of matter is a nucleic acid.

- 5 19. The method of claim 18, wherein the carrier is a
diluent, an aerosol, a topical carrier, an aqueous
solution, an ionic solution, a nonaqueous solution
or a solid support.

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